

I/WE CLAIM:

1. A lawn tractor comprising:

5 a frame;

an engine supported by said frame;

a mower deck supported by said frame, said mower deck comprising at least first and second cutting blades;

10 first and second blade pulleys operatively connected to said first and second cutting blades, respectively, wherein rotation of said first and second blade pulleys causes corresponding rotation of said first and second cutting blades, respectively;

a drive system comprising a drive pulley rotatably connected to said engine and a belt operatively connecting said drive pulley to said first and second blade pulleys; and,

15 a vibration damping mechanism comprising a first idler pulley operatively connected to a slack portion of said belt and a second idler pulley operatively connected to a tension portion of said belt.

2. A lawn tractor according to claim 1 wherein said vibration damping mechanism further comprises:

20 first and second biasing means operatively connected to said first and second idler pulleys, respectively.

3. A lawn tractor according to claim 2 wherein the biasing tension force of the first biasing means is within +/- 15% of the biasing tension force for the second biasing means.

25 4. A lawn tractor according to claim 3 wherein the biasing tension force of the first biasing means is within +/- 10% of the biasing tension force for the second biasing means.

5. A lawn tractor according to claim 4 wherein the biasing tension force of the first biasing means is within $\pm 5\%$ of the biasing tension force for the second biasing means.

6. A lawn tractor according to claim 5 wherein the first and second biasing means
5 are substantially identical springs.

7. A lawn tractor according to claim 2 wherein said vibration damping mechanism further comprises:

first and second pulley arms operatively connected to said first and second blade pulleys,
10 respectively, wherein said first and second pulley arms further comprise an opening for receiving an associated tool.

8. A lawn tractor according to claim 2 wherein:
the position of said first idler pulley is elevated relative to the position of said second
15 idler pulley.

9. An apparatus comprising:
a mower deck comprising at least a first cutting blade positioned within said deck and at
least a first blade pulley operatively connected to said first cutting blade, wherein rotation of said
20 first blade pulley causes corresponding rotation of said first cutting blade;
a drive system comprising a drive pulley and a belt operatively connecting said drive
pulley to said blade pulley; and,
a vibration damping mechanism comprising a first idler pulley operatively connected to a
slack portion of said belt and a second idler pulley operatively connected to a tension portion of
25 said belt.

10. An apparatus according to claim 9 wherein said vibration damping mechanism further comprises:

first and second biasing means operatively connected to said first and second idler pulleys, respectively.

11. An apparatus according to claim 10 wherein the biasing tension force of the first
5 biasing means is within +/- 15% of the biasing tension force for the second biasing means.

12. An apparatus according to claim 11 wherein the biasing tension force of the first biasing means is within +/- 10% of the biasing tension force for the second biasing means.

10 13. An apparatus according to claim 12 wherein the biasing tension force of the first biasing means is within +/- 5% of the biasing tension force for the second biasing means.

14. An apparatus according to claim 13 wherein the first and second biasing means are substantially identical springs.

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15. A method of damping the vibrations of a lawn tractor comprising the steps of:
providing a frame, an engine supported by said frame, a mower deck supported by said frame, at least a first cutting blade, at least a first blade pulley, and a drive system comprising a drive pulley and a pulley belt operatively connecting said drive pulley to said first blade pulley,
20 and a vibration damping mechanism comprising a first idler pulley and a second idler pulley;
connecting said first idler pulley to a slack portion of said pulley belt and said second idler pulley to a tension portion of said pulley belt;
rotating said first cutting blade with said drive system thereby creating a vibration; and,
damping said vibration with said first and second idler pulleys.

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16. The method according to claim 15 further comprising the steps of:
providing a first and second idler pulley arm each pivotably attached to said deck, a first biasing means operatively connected to said first idler pulley arm, and a second biasing means operatively connected to said second idler pulley arm; and,

wherein the step of damping said vibration with said first and second idler pulleys comprises the step of pivoting said first and second idler pulley arms.